WHAT IS CLAIMED IS:

1. A polyurethane film comprising a film prepared from an aqueous polyurethane dispersion, the dispersion being prepared from a nonionic polyurethane prepolymer and water, wherein the nonionic polyurethane prepolymer is prepared from a polyisocyanate and a low monol polyether polyol.

2. The polyurethane film according to Claim 1 wherein the dispersion is prepared in the presence of a surfactant and in the substantial absence of an organic solvent.

3. The polyurethane film according to Claim 1 wherein the low monol polyether polyol has a molecular weight of at least 3000 Daltons.

4. The polyurethane film according to Claim 1 wherein the low monol polyether polyol has a measured unsaturation of less than about 0.025 meq/g.

5. The polyurethane film according to Claim 1 wherein the polyisocyanate is an aromatic polyisocyanate selected from the group consisting of MDI, TDI and mixtures thereof.

6. The polyurethane film according to Claim 1 wherein the nonionic polyurethane prepolymer has an average practical functionality of less than about 2.1.

7. The polyurethane film according to Claim 1 wherein the nonionic polyurethane prepolymer has an isocyanate content of from about 1 to about 9 weight percent.

8. A glove prepared from the film of Claim 1.

9. A process for preparing an aqueous polyurethane dispersion comprising

preparing a nonionic polyurethane prepolymer from a polyisocyanate and a low monol polyol; and

admixing the nonionic polyurethane prepolymer with water.

10. The process according to Claim 9 wherein the dispersion is prepared in the presence of a surfactant and in the substantial absence of an organic solvent.

11. The process according to Claim 9 wherein the low monol polyether polyol has a molecular weight of at least 3000 Daltons.

12. The process according to Claim 9 wherein the low monol polyether polyol has a measured unsaturation of less than about 0.025 meq/g.

13. The process according to Claim 9 wherein the polyisocyanate is an aromatic polyisocyanate selected from the group consisting of MDI, TDI and mixtures thereof.

14. An aqueous polyurethane dispersion prepared according to the process of Claim 9.

15. The aqueous polyurethane dispersion according to Claim 14, wherein the dispersion has a particle size of from 0.9 microns to 0.05 microns.

16. The aqueous polyurethane dispersion according to Claim 14, wherein the dispersion has a solids content of from 5 to 60 weight percent.